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MEG-03-005

May 21, 2004

To: Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject: Serial No. 10/796,427 03/09/04

Mou-Shiung Lin et al.

POST-PASSIVATION METAL SCHEME ON AN IC CHIP WITH COPPER

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 24, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date Stephen B. Ackerman 5/24/04

U.S. Patent Application MS-002CCC_CIP, filed 05/24/02, Serial No. 10/154,662, assigned to the same assignee, "Top Layers of Metal for High Performance IC's," discusses the manufacturing of high performance Integrated Circuit (IC's).

U.S. Patent Application MEG-02-016, filed 05/27/03, Serial No. 10/445,558, assigned to the same assignee, "High Performance System-on-Chip Inductor Using Post Passivation," discusses the manufacturing of high performace IC's.

U.S. Patent Application Publication US 2004/0029404 A1 to Lin, "High Performance System-on-Chip Passive Device Using Post Passivation Process," discloses a system and method for forming post passivation passive components, such as resistors and capacitors.

U.S. Patent Application Publication US 2004/0016948 A1 to Lin, "High Performance System-on-Chip Discrete Components Using Post Passivation Process," discloses a system and method for forming post passivation discrete components.

U.S. Patent 6,544,880 to Akram, "Method of Improving Copper Interconnects of Semiconductor Devices for Bonding," discloses gold over a copper pad and optionally additional metals to prevent formation of intermetallic compounds in wire bonding.

The following two U.S. Patents teach using an Al cap over a copper bond pad for wire bonding:

1) U.S. Patent 6,451,681 to Greer, "Method of Forming Copper Interconnection Utilizing Aluminum Capping Film".
2) U.S. Patent 6,376,353 to Zhou et al., "Aluminum and Copper Bimetallic Bond Pad Scheme for Copper Damascene Interconnects."

The following two U.S. Patents discloses a post-passivation interconnection process:

1) U.S. Patent 6,495,442 to Lin et al., "Post Passivation Interconnection Schemes on Top of the IC Chips."
2) U.S. Patent 6,383,916 to Lin, "Top Layers of MEtal for High Performance IC's."

Sincerely,

Stephen B. Ackerman,
Reg. No. 37761

FORM PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MEG-03-005	10/796,427
Applicant: Mou-Shiung Lin et al.	
Filing Date: 03/09/04	Group Art Unit:

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6544880	4/8/03	Akram	438	617	6/14/99
	6451681	9/17/02	Greer	438	601	10/4/99
	6376353	4/23/02	Zhou et al.	438	612	7/3/00
	6495442	12/17/02	Lin et al.	438	618	10/18/00
	6383916	5/7/02	Lin	438	637	2/17/99

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	Translation NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

- US Patent App. MSL-98-002ccc CIP, Filed 05/24/02, Ser # 10/154,662, assigned to the same assignee, "Top Layers of Metal for High Performance Ic's".
- US Patent App. MEG-02-016, Filed 05/27/03, Ser. # 10/445,558, "High Performance System-on-Chip Inductor Using Post Passivation Process".

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MEG-03-005	10/796,427
Applicant: Mou-Shiung Lin et al.	
Filing Date: 03/09/04	Group Art Unit:

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	Translation NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	–	U.S. Patent App. Pub. US 2004/0029404 A1 to Lin, Pub. Date 2/12/04, Filed 5/27/03, US Cl. 438/958.
	–	U.S. Patent App. Pub. US 2004/0016948 A1 to Lin, Pub. Date 1/29/04, Filed 5/27/03, US Cl. 257/300.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.